CLAIMS

1. An electric motor, comprising:

(a) a stator having a circular magnetic conductor wherein an even number of permanent magnets are attached at a uniform pitch;

(b) a rotor, the rotor being separated from the stator by an air gap and carrying a plurality of electromagnets interacting with the permanent magnets in the stator;

(c) a distributing collector, the collector being attached to the stator and having a plurality of current conductor plates located around the collector's circumference, the plurality of current conductor plates being separated by dielectric gaps and further being electrically connected at alternating polarity to a direct current supply;

(d) a plurality of brushes attached to the rotor, at least two of the brushes being electrically connected with at least two of the collector plates and each brush being electrically connected to at least two of the electromagnet coil windings, wherein the coil windings of adjacent electromagnets are electrically connected in pairs and in series aiding, and the windings of the coils of a pair of diametrically opposite electromagnets in series opposing;

(e) capacitors being electrically connected to the leads of the electromagnet coil windings electrically connected to the brushes thereby forming a plurality of resonant circuits;

(f) wherein the number (n) of the permanent magnets of the stator and the number (m) of the resonant circuits being determined from the equations $n=10+4k$, $m = 2+k$, where k is a whole number; and

(g) wherein the number of plates in the distributing collector being equal to the number of permanent magnets in the stator, and the axial lines of the dielectric gaps in the distributing collector being aligned along the axial lines of the permanent magnets of the stator.

2. The electric motor of claim 1, wherein the number of loops in the coil windings of diametrically opposite electromagnets is different, the difference being selected from set of ratios consisting of 1/32, 1/16, 1/8, and 1/4.

3. The electric motor of claim 1, wherein the rating of at least one of the capacitors electrically connected to the electromagnet coil windings is proportional to the total number of loops in these windings.

4. The electric motor of claim 2, wherein the rating of at least one of the capacitors electrically connected to the electromagnet coil windings is proportional to the total number of loops in these windings.

5. The electric motor of claim 1, wherein the rotor is located outside of the stator.

6. The electric motor of claim 2, wherein the rotor is located outside of the stator.

7. The electric motor of claim 3, wherein the rotor is located outside of the stator.

8. The electric motor of claim 4, wherein the rotor is located outside of the stator.

9. The electric motor of claim 1, wherein the rotor is located inside of the stator.

10. The electric motor of claim 2, wherein the rotor is located inside of the stator.

11. The electric motor of claim 3, wherein the rotor is located inside of the stator.

12. The electric motor of claim 4, wherein the rotor is located inside of the stator.

13. The electric motor of claim 1, wherein the brushes are adjustable in a position on the circumference relative to the collector.

14. The electric motor of claim 2, wherein the brushes are adjustable relative to the collector plates.

15. The electric motor of claim 3, wherein the brushes are adjustable relative to the collector plates.

16. The electric motor of claim 4, wherein the brushes are adjustable relative to the collector plates.

17. The electric motor of claim 5, wherein the brushes are adjustable relative to the collector plates.

18. The electric motor of claim 6, wherein the brushes are adjustable relative to the collector plates.

19. The electric motor of claim 9, wherein the brushes are adjustable relative to the collector plates.

20. The electric motor of claim 10, wherein the brushes are adjustable relative to the collector plates.